Reviewer's report

Title: Comparative Chest Computed Tomography Findings of Non-tuberculous Mycobacterial Lung Diseases and Pulmonary Tuberculosis in Patients with AFB Smear-Positive Sputum

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Reviewer: ulas bagci

Reviewer's report:

Authors presented a study to identify differences between NTM-LD and PTB patients in CT appearances of those scans. Although the paper has several strengths, I have found the following major and minor drawbacks that author may need to address.

MAJOR CONCERNS:
- There is no radiologist score reported, inter and intra operator agreement rates. Without having these values, it is not known if radiologists missed any of the abnormal imaging patterns. Reliability of the reading system is not known. Are there also any CAD system used for supporting radiologists' reading tasks?
- CT scans were 5 mm, it seems, and authors claimed to identify TIB appearances in these low resolution scans. I suggest authors to look at the following auto-detection algorithm of TIB patterns (Bagci, U. et al. IEEE TBME, VOL 59(6), PP. 1620-1632, 2012) where authors mentioned the limitation of the visibility of TIB in 5mm CT scans with naked eyes.
- Did authors use any quantitative metric for the amount of abnormal imaging patterns in the CT scans, or only existence or non-existence was coded? For example, the size (and shape) of the cavity, density (volume) of the nodules, and again size of the honeycombing may change from NTM to PTB too. Otherwise, the higher frequency of certain imaging patterns in NTM (or in PTB) is not a new finding.

MINOR CONCERNS:
- It seems not all patients have CT scans (95 CT scans from 159 patients). How can it be possible to say authors analyzed 159 patients if authors are only analyzing 95 scans? I think, authors should change the wording and say exactly how many discreet CT scans (and patients) they analyzed.

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being
Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests